SCP Metrics Development

The need for identifying metrics for use in evaluating the effectiveness of environmental and public health programs is not new. One ongoing challenge is how we can develop metrics and collect data that represent actual environmental and health outcomes, rather than those which focus on program process outputs.

The metric options below represent some initial thoughts about metrics that may be relevant to measure the value and effectiveness of the Safer Consumer Products program. Some of these options are grand in scale and would require SCP to rely on collaborations with other agencies and researchers and possibly allocate additional staffing and funding to gather the data, while others are easily obtainable.

Outcome-based metrics could include data indicating state-wide reduction in SCP's Chemicals of Concern (CoC) in the humans and the environment, however these data might take years to collect and for persistent chemicals, years to diminish. Additionally, the data might be confounded by factors beyond SCP's actions. Other options represent easily-collectible metrics that we could start compiling immediately, although their value is less clear, particularly if those metrics are primarily related to outputs. A significant amount of work has been done within CalEPA and other organizations to identify and assess "environmental indicators" and SCP should consider that work in developing approaches that may be helpful for our program. Meanwhile, it is important to have a variety of near-term and long-term metric options that consider and evaluate the multi-faceted impacts of the SCP program.

SCP would appreciate the Panel's thoughts on metrics to prioritize for further analysis to demonstrate the effectiveness of our program. The list of metrics below is provided to exemplify a range of options that might be suitable but is not representative of an exhaustive analysis. As such, ideas beyond the list below are welcomed and encouraged.

External metrics (measurements made outside of SCP; indicators of our impact):

- *Long-term metrics*
    - Public health and environmental health metrics
        - Biomonitoring and environmental monitoring
        - Changes in health outcomes – likely difficult to measure across the entire population of "consumers", likely more effective for highly exposed populations (workers, etc.)
        - Dose-response-based Benefit Analysis, including non-cancer endpoints
    - Economic data
        - Chemical reporting data that track declines in chemical use over time
        - Models that track declines in chemical use that may be attributable to SCP
        - Cost savings to other CA agencies

- *Short-term metrics*
    - Number of Priority Products (PP) removed from the market
    - Number of safer products (i.e., products that went through AA process and safer alternative was selected)
    - Total costs of conducting AAs – how does this compare to the avoided costs of pollution and public health impacts?
    - Number of PP's that represent the "first" or "leading the country" in chemical regulation

Internal metrics: Many of these data are already collected, but are primarily *outputs,* not *outcomes*.

- Successful compliance tests and results (e.g. measured flame retardants in children's nap mats)
- Number of Priority Products listed
- Number of product chemical scoping studies
- Number of AAs received
- Number of Regulatory Responses
- Number of Workshops hosted
- Attendees at workshops and webinars
- Surveys on the effectiveness and quality of workshops/webinars
- Website metrics (page views, CC List downloads, etc.)
- Track number of emails to SCP (bin into questions, positive, or negative comments)

Public Perceptions: Assessment of the public perception of SCP can improve our understanding of our communication and outreach effectiveness. SCP could use surveys, case studies, and interviews to gather this data at periodic intervals.

- Perceived value of safer products
- Perceived value of SCP
- Awareness about SCP among industry, academia, general public, EJ communities, smaller agencies, children, men/women, sensitive sub-pops
- Ask impacted communities if they feel safer as a result of SCP's work

Difficult to measure outcomes:

- SCP may act as an impetus for regulatory or policy actions at the federal level or in other states
- Outcomes from open, public access to Alternatives Analyses (might be helpful to manufacturers making similar products, other states, municipalities)
- Preemptive reformulations based on inclusion of chemical and product in the workplan (ex. resilient flooring phased out ortho-phthalates)
- Chemical substitution prior to AA – did companies choose a safer or regrettable substitute?
- Saving business money by avoiding regrettable substitutes